An Analysis of the Possibilities of
Increasing Returns to Dairy Farmers
Through the Subsidization of Exports
of Butter from the United States.

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by

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Introduction

Section 32 of the Amendments to the Agricultural Adjustment Act, approved August 24, 1935, appropriates for use in each fiscal year an amount equal to 30 percent of the gross receipts collected under the customs laws during the calendar year preceding the beginning of each such fiscal year. The funds so appropriated may be used to "(1) encourage the exportation of agricultural commodities and products thereof by the payment of benefits in connection with the exportation thereof or of indemnities for losses incurred in connection with such exportation or by payments to producers in connection with the production of that part of any agricultural commodity required for domestic consumption; (2) encourage the domestic consumption of such commodities or products by diverting them, by the payment of benefits or indemnities or by other means, from the normal channels of trade and commerce; and (3) finance adjustments in the quantity planted or produced for market of agricultural commodities." The funds are to be used for the purpose of three (3) above only if the Secretary of Agriculture determines that the use of the funds as outlined in (1) and (2) is not necessary to effectuate the purposes of section 32. Funds from this source will amount to over $100,000,000 per year on the basis of customs receipts during the calendar year 1935, and, of course, will be somewhat higher or lower in the future should customs receipts increase or decrease.

Exportation of butter under a subsidization plan has been suggested as a possible means by which returns to dairymen might be maintained or increased. Such a plan would involve the sale of butter abroad at prices lower than domestic prices. Presumably, the basic hypothesis underlying such a proposal is that the removal of substantial quantities of butter from the domestic market would result in increases in domestic prices to the extent that total returns to producers would be greater than if the entire supply were sold in domestic markets.

In considering such a plan, it is necessary to take into account such factors as (1) the possible outlets for exports, (2) the effect of exports on domestic prices, and (3) prices received for the exported products.

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I

International Trade in Butter

In contrast with the decline in the volume of the world trade in agricultural commodities that has occurred since the advent of the business depression, there has been a marked rise in the volume of international trade in butter during the same period. In 1929, twenty-two countries exported 1,130,000,000 pounds of butter. In 1934, these same countries exported 1,301,000,000 pounds of butter, an increase of 15 percent. Denmark has been the most important exporter of butter for many years, though her proportion of total world exports has declined since 1930. In 1930, exports from Denmark amounted to 31.7 percent and in 1934 had declined to 25.4 percent of the exports of the 22 principal butter-exporting countries. Exports from Denmark in 1934 were 330,000,000 pounds; from New Zealand, 293,000,000 pounds; and from Australia, 247,000,000 pounds. (See Table 1 and Figure 1.)

While there has been an expansion in the volume of butter entering world trade in recent years, the scope of the market for such butter has been curtailed. The bulk of the butter exported by the important exporting countries has been taken in recent years by the United Kingdom, and since 1929 the proportion of such exports marketed in the United Kingdom has increased markedly. In 1929 the United Kingdom took about 64 percent, amounting to 702,700,000 pounds, of the total imports of fourteen countries, these countries being the only significant importers. In 1933, the proportion increased to about 83 percent, and in 1934 to about 85 percent, or 1,075,600,000 pounds. Germany has been the second largest importer in recent years, though her imports have declined markedly since 1930, largely as a result of import restrictions. In 1934, she took only 10.7 percent (136,200,000 pounds) of the total imports of the chief importing countries as compared with 26.8 percent (296,200,000 pounds) in 1929. (See Table 2 and Figure 2.)

Other important butter-importing countries are Belgium, France, Italy, and Switzerland, but imports into these countries are small relative to imports into the United Kingdom and Germany. Imports into these countries in 1934 were as follows: Belgium, 20,600,000 pounds; France, 9,600,000 pounds; Italy, 3,400,000 pounds; and Switzerland, 700,000 pounds.

Table 1. Exports of butter from principal exporting countries, calendar years 1928 to 1934

Country	1929		1930		1931		1932		1933		1934	
	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total
Denmark	351	31.1	373	31.7	378	29.8	347	28.6	331	26.9	330	25.4
Scandinavian countries1/	93	8.2	97	8.2	83	6.5	64	5.3	65	5.3	76	5.8
U.S.S.R. (Russia)	56	5.0	23	2.0	68	5.4	68	5.6	82	6.7	84	6.4
Baltic countries2/	103	9.1	114	9.7	120	9.5	93	7.6	80	6.5	88	6.8
Netherlands	104	9.2	92	7.8	73	5.8	45	3.7	63	5.1	81	6.2
Irish Free State	63	5.6	59	5.0	42	3.3	37	3.0	45	3.6	57	4.4
New Zealand	185	16.4	211	17.9	223	17.6	245	20.2	295	24.0	293	22.5
Australia	105	9.3	127	10.8	192	15.1	229	18.9	212	17.2	247	19.0
Argentina	37	3.2	50	4.3	49	3.9	57	4.7	31	2.5	18	1.4
Eight other countries3/	33	2.9	30	2.6	40	3.1	29	2.4	27	2.2	27	2.1
Total	1,130	100.0	1,176	100.0	1,268	100.0	1,214	100.0	1,231	100.0	1,301	100.0

Computed from (United Kingdom) Imperial Economic Committee, Intelligence Branch, Dairy Produce Supplies in 1934, Supplement to Weekly Dairy Produce Notes, p. 64, July 1935.

1/ Norway, Sweden, and Finland.

2/ Estonia, Latvia, Lithuania, and Poland.

3/ Canada, United States, Belgium, Austria, Hungary, France, Union of South Africa, and South-West African territory

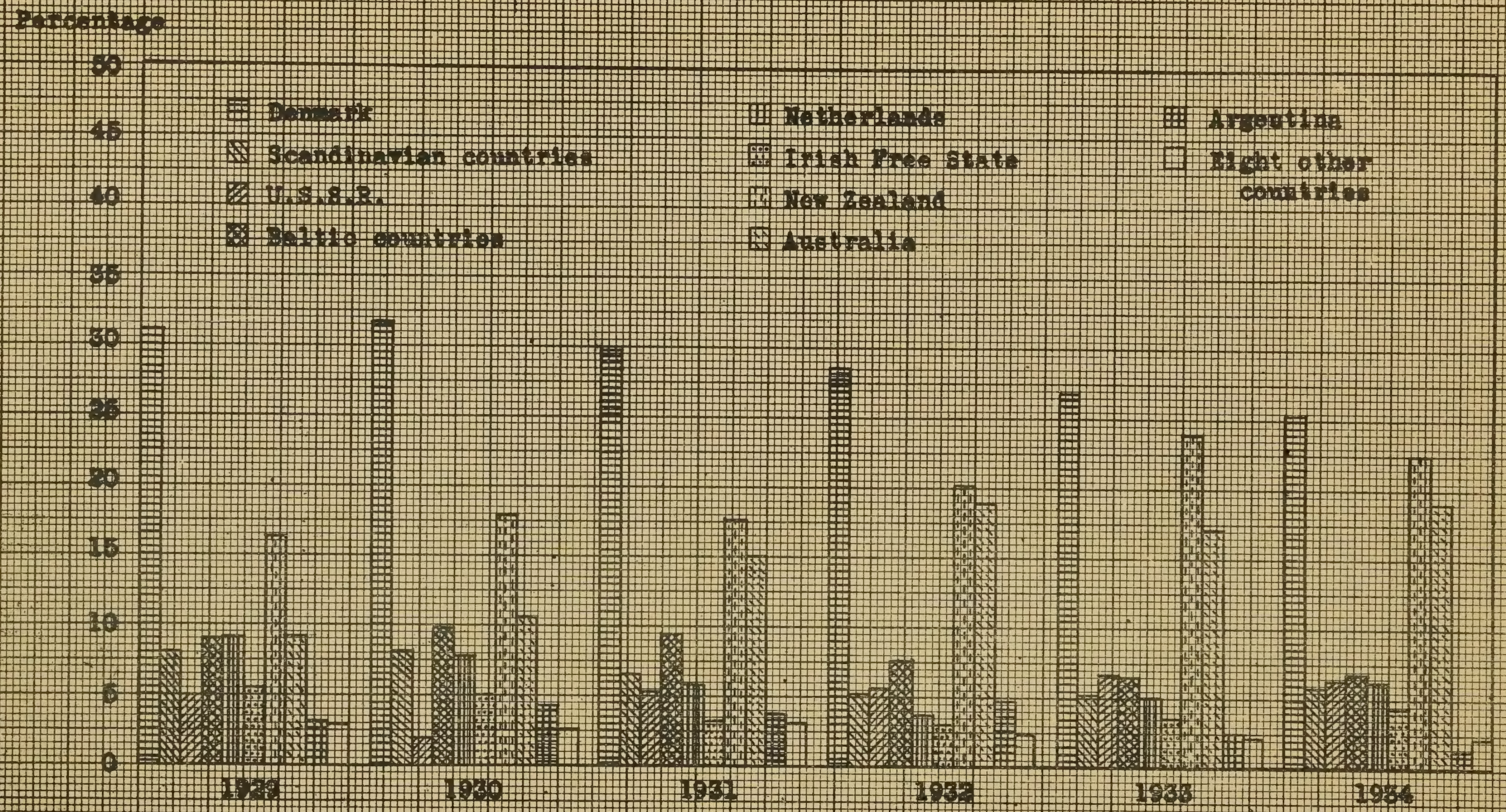

Figure 1. Percentage distribution of world exports of butter by principal exporting countries

Denmark has been the most important exporter of butter for many years. In 1930 exports from Denmark amounted to 32 percent of the exports of the 22 principal butter exporting countries. By 1934, her share in these exports had declined, however, to 25 percent.

Table 2. Imports of butter into principal importing countries, calendar years 1929 to 1934.

Country	1929		1930		1931		1932		1933		1934	
	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total	Million pounds	Percent of total
United Kingdom 1/	702.7	63.7	744.7	63.9	863.4	69.7	902.3	76.7	979.6	82.6	1075.6	84.8
Irish Free State	4.6	.4	3.4	.3	3.4	.3	2.7	.2	-	-	-	
Germany	296.2	26.8	293.6	25.2	221.0	17.8	153.2	13.1	130.4	11.0	136.2	10.7
Belgium	9.5	.9	22.4	1.9	41.6	3.4	46.8	4.0	27.3	2.3	20.6	1.6
France	9.7	.9	12.9	1.1	40.9	3.3	26.1	2.2	20.3	1.7	9.6	.8
Switzerland	16.7	1.5	18.8	1.6	23.3	1.9	8.2	.7	1.1	.1	0.7	.1
Italy	1.9	.2	3.1	.3	6.2	.5	3.8	.3	2.4	.2	3.4	.3
Seven other countries 2/	62.4	5.6	66.8	5.7	38.0	3.1	33.0	2.8	24.4	2.1	22.4	1.7
Total	1103.7	100.0	1165.7	100.0	1237.8	100.0	1176.1	100.0	1185.5	100.0	1268.5	100.0

Computed from (United Kingdom) Imperial Economic Committee, Intelligence Branch, Dairy Produce Supplies in 1934, Supplement to Weekly Dairy Produce Notes, p. 65, July 1935.

1/ Net imports, i.e., total imports less re-exports.

2/ Czech-Slovakia, Netherlands, Dutch East Indies, Algeria, British India, British Malaya, and Canada.

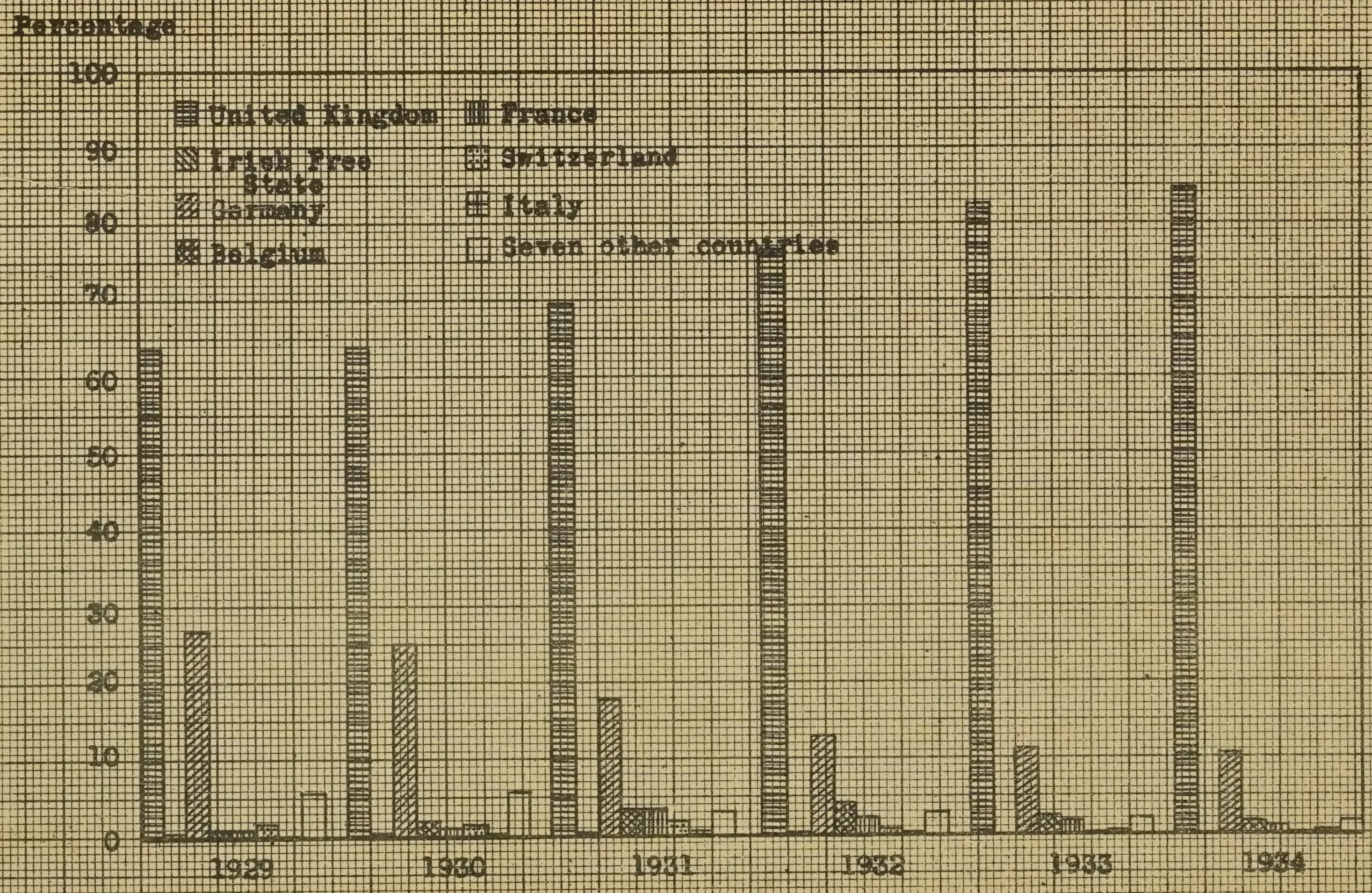

Figure 2. Percentage distribution of world imports of butter by principal importing countries

The most important butter-importing country is the United Kingdom. Since 1929 that country has taken a continually increasing proportion of the butter entering world trade. In 1929 she took about 64 percent of the total imports of the 14 most important importing countries. By 1934 this proportion had increased to about 85 percent.

II

The Foreign Trade of the United States in Butter.

The United States has never exported a very significant volume of butter relative to domestic production. However, butter has at times been imported, the peak year being 1920-21 when 34,344,000 pounds were imported. Imports of butter during the fiscal year 1934-35 amounted to 22,393,000 pounds. (See Table 3 and Figure 3.)

The United States has no established export trade with major butter-importing countries, most of the exports going to Central and South American countries. During the war period exports reached a peak of 33,740,000 pounds in 1918-19. In 1926-27, total exports from the United States amounted to 5,048,000 pounds. (See Table 4.) Since 1926-27, exports have declined steadily, and amounted to only 761,000 pounds in 1934-35. In 1926-27, Mexico, Cuba, and Panama were the largest importers of American butter, these countries taking 17.0 percent, 14.5 percent, and 11.5 percent, respectively, of the total exports in that year. In 1934-35, Mexico, Cuba, and Panama took 22.5 percent, 0.3 percent, and 8.4 percent, respectively, of the total exports, and the Philippines and Haiti took 12.7 percent and 9.9 percent, respectively. Exports from the United States to the United Kingdom and Germany, which are the important butter importing countries, have been negligible in recent years. In considering whether exports to the South and Central American areas could be expanded, it is to be noted that present exports are largely for the demand of American and European citizens residing in these countries, rather than for the native population. Therefore, the market for butter in these countries is limited, unless prices were lowered to a point where they would supplant the use of tropical oils among the native population.

Table 3. Imports of butter into the United States, by countries of consignment, 1929-30 to 1934-35.

Country of consignment	1929-1930		1930-1931		1931-1932		1932-1933		1933-1934 1/		1934-1935 1/	
	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total	1,000 pounds	Percent of total
United Kingdom	171	6.0	17	1.3	38	2.1	129	13.0	60	7.9	3,784	16.9
Denmark	1,109	38.9	172	12.9	210	11.4	124	12.5	193	25.3	2,166	9.7
Other European countries	38	1.3	26	2.0	34	1.8	106	10.7	121	15.8	7,985	35.6
New Zealand	1,141	40.0	877	66.0	729	39.7	547	55.2	330	43.2	7,183	32.1
Canada	142	5.0	162	12.2	709	38.6	64	6.5	47	6.2	98	.4
Other countries	250	8.8	75	5.6	118	6.4	21	2.1	12	1.6	1,177	5.3
Total	2,851	100.0	1,329	100.0	1,838	100.0	991	100.0	763	100.0	22,393	100.0

Data secured from the Foreign Agricultural Service Division, Bureau of Agricultural Economics, United States Department of Agriculture.

1/ Imports for consumption; others general imports.

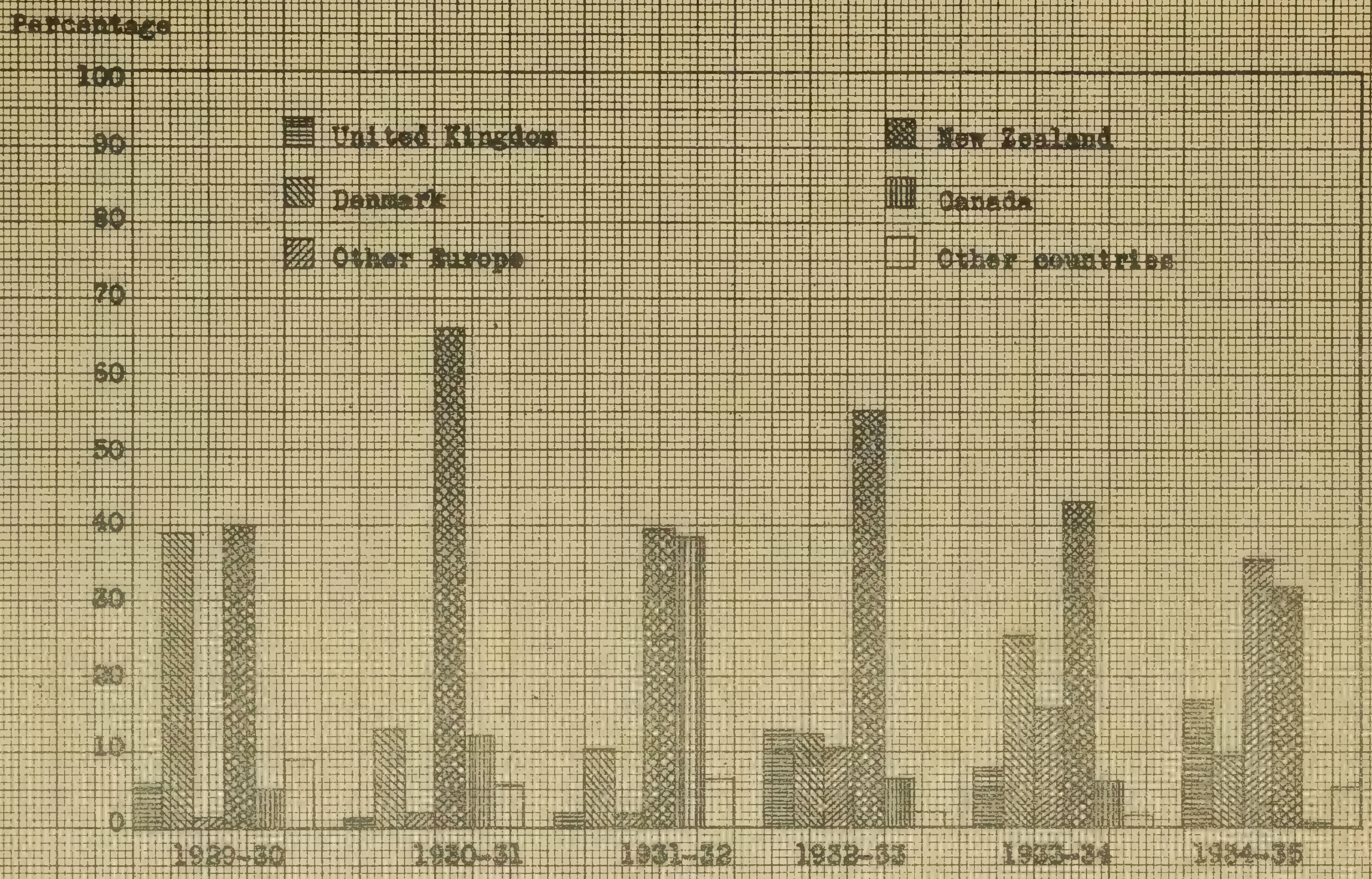

Figure 3. Percentage Distribution of Imports of Butter into the United States by countries of consignment.

New Zealand is the most important source of foreign butter entering the United States. Imports from that country in the fiscal year 1934-35 amounted to about 32.1 percent of the total imports into the United States. It is probable that a considerable portion of the imports from the United Kingdom in 1934-35 consisted of New Zealand butter.

Table 4. Exports (domestic) of butter from the United States, by countries, 1926-1927 to 1934-35.

Country of destination	1926-27		1927-28		1928-29		1929-30		1930-31		1931-32		1932-33		1933-34		1934-35	
	1,000 pounds	% of total	1,000 pounds	% of total	1,000 pounds	of total	1,000 pounds	% of total	1,000 pounds	% of total	1,000 pounds	% of total	1,000 pounds	% of total	1,000 pounds	% of total	1,000 pounds	% of total
United Kingdom	0	0	20	.5	5	.1	20	.6	80	3.5	1/	-	1	.1	1/	-	1/	-
Honduras	150	3.0	143	3.6	157	4.2	164	4.6	151	6.6	139	8.8	108	7.8	72	5.1	31	4.1
Panama	582	11.5	311	7.8	227	6.0	342	9.5	157	6.8	135	8.6	369	26.6	206	14.5	64	8.4
Mexico	859	17.0	724	18.3	672	17.8	617	17.2	426	18.6	179	11.3	128	9.2	161	11.4	171	22.5
Cuba	734	14.5	479	12.1	370	9.8	96	2.7	6	.3	9	.6	1	.1	1	.1	2	.3
Haiti	498	9.9	479	12.1	479	12.7	458	12.8	394	17.2	401	25.4	291	21.0	208	14.7	75	9.9
Other West Indies2/	550	10.9	391	9.9	394	10.4	380	10.6	270	11.8	244	15.5	214	15.4	186	13.1	116	15.2
Columbia	163	3.2	143	3.6	164	4.3	122	3.4	61	2.7	23	1.5	12	.9	18	1.3	3	.4
Peru	356	7.1	358	9.0	451	12.0	371	10.4	67	2.9	57	3.6	14	1.0	8	.6	-	-
Venezuela	381	7.5	190	4.8	264	7.0	329	9.2	269	11.7	119	7.5	45	3.2	38	2.7	35	4.6
Philippines	187	3.7	190	4.8	152	4.0	210	5.8	154	6.7	84	5.3	83	6.0	383	27.0	97	12.7
Other Countries	588	11.7	537	13.5	443	11.7	473	13.2	258	11.2	188	11.9	120	8.7	135	9.5	167	21.9
Total	5,048	100.0	3,965	100.0	3,778	100.0	3,582	100.0	2,293	100.0	1,578	100.0	1,386	100.0	1,416	100.0	761	100.0

Data secured from the Foreign Agricultural Service Division, Bureau of Agricultural Economics, United States Department of Agriculture.

1/ Less than 500 pounds.

2/ Excludes Bermudas.

III

World Trade Barriers in Relation to Butter

In recent years the various importing countries have adopted restrictions or increased such restrictions against butter imports. These restrictions have taken the form of either higher tariffs, import quotas, exchange regulation, or a combination of these.

1. United Kingdom.

The domestic production of butter in the United Kingdom is only about 10 percent of apparent consumption, so that that country is markedly dependent upon imports for her supplies. For many years the United Kingdom followed a free trade policy, with no tariff or quota restrictions to affect the volume of imports of butter. In recent years, however, various measures have been adopted in the interest of domestic producers and of the butter-exporting Dominions. The suspension of gold payments by the United Kingdom in September 1931, while brought about by financial considerations, was the first of those measures which tended to benefit home and Dominion producers and producers in countries on the so-called sterling basis.1/ It appears that butter exporters in the gold standard countries were placed at a definite disadvantage as a result of the abandonment of the gold standard by the United Kingdom.

The Import Duties Act, effective March 1, 1932, tended further to restrict imports from foreign countries. Under this Act a ten percent ad valorem duty was placed on milk, cream, butter, cheese, and processed milk, while Empire supplies were exempt. On November 15, 1932, the tariff on dairy products was changed pursuant to the Ottawa Agreements Act. An import duty of 15 shillings per 112 pounds, equivalent at the October 1935 rate of exchange to 3.3 cents per pound, was levied on all foreign butter, while Empire supplies continued to be exempt. In the Ottawa Agreements the United Kingdom reserved the right, as regards dairy and poultry products, to impose import duties and quantitative restrictions on Dominion supplies, if it considered it necessary in the interests of British producers, at the end of three years from the time the duties went into effect, so long as preferential margins were maintained in favor of the Dominions.2/ While, on this basis, the United Kingdom has been at liberty to impose quotas and tariffs against all external supplies since November, 15, 1935, no action had been taken by the United Kingdom at the time of this writing.

During 1933, 1934, and 1935 the United Kingdom entered into trade agreements with a number of European governments. Under some of these agreements, the United Kingdom agrees, in the case imports of butter are placed under a quota system, to assign quotas to the contracting foreign countries on the basis of the volume of imports of butter from these countries in recent years. In some instances contingent quotas, which will apply if quota restrictions are established, are named. For example,

1/ *World Dairy Prospects*, May 24, 1934, Bureau of Agricultural Economics, United States Department of Agriculture.

2/ Imperial Economic Conference in 1932, *Summary of Proceedings and Copies of Trade Agreements, 1932.*

a quota of 2,300,000 hundredweight (of 112 pounds) per year is assigned to Denmark. Provision is made for these quotas to be increased in the event that total imports exceed 8,100,000 hundredweight per year. The countries with whom agreements were concluded are Denmark, Norway, Sweden, Latvia, Estonia, Finland, Poland, and Lithuania.3/

2. Germany.

Germany, while producing approximately 75 percent of the total butter consumed in that country, has for some years been the world's second largest importer of butter. Since 1930 increasing restrictions have been placed against imports of butter into that country. On November 27, 1930, the tariff was increased from 27.50 reichmarks to 50 reichmarks per 100 kilos, and on January 23, 1932, the total quantity of butter that could be imported from any country annually at the latter rate of duty was limited to 5,000 metric tons (11,023,000 pounds). Additional imports were dutiable at 100 reichmarks per 100 kilos. On November 15, 1932, the rate of duty was increased to 75 reichmarks per 100 kilos and a quota system was established, quotas among the various butter-exporting countries being apportioned on the basis of their average exports to Germany during the period 1929 to 1931. The total quota was originally fixed at 121,000,000 pounds. In 1934 this was reduced to about 99,000,000 pounds. On September 24, 1934, additional restrictions were adopted. In order to make the quota system more effective and in order to conserve the country's supply of foreign exchange, a licensing system with respect to butter imports was established. The plan is administered by an Import Control Board cooperating with the Foreign Exchange Offices. In addition to the basic tariff rates described above, butter imported into Germany has been subject since early in 1934 to a surcharge, the purpose of which is to bring the price of the foreign butter up to the fixed internal level.4/

3. France.

A system of quantitative regulation of imports of butter by quotas has been in operation in France since 1931. During 1934 imports were drastically reduced and for the last six months of the year no quotas were allowed. In addition to the quantitative control there is levied in that country an import duty and a license tax on foreign butter.5/ Since July 1935 a bounty has been paid, under certain conditions, on good quality butters exported to foreign countries.6/

4. Belgium.

The importation of butter into Belgium has been subject to quantitative regulation since April 1932. Quotas are fixed each month.

3/ (United Kingdom) Imperial Economic Committee, Intelligence Branch, Dairy Produce Supplies in 1934, Supplement to Weekly Dairy Produce Notes, p. 84, July 1935.

4/ Import and Export Section, Agricultural Adjustment Administration, United States Department of Agriculture.

5/ (United Kingdom) Imperial Economic Committee, Intelligence Branch. Dairy Produce Supplies in 1934, Supplement to Weekly Dairy Produce Notes, p. 75. July 1935.

6/ (United Kingdom) Board of Trade Journal, "Export Bounty on Butter", 135(2018):219, August 8, 1935.

Beginning in the second half of 1933, importers have been required to pay a license tax, the amount of which is fixed each month and depends on the difference between the price in the domestic and foreign markets.7/

5. Italy.

Increases in the import duty on foreign butter were imposed by Italy in 1932 and in January 1934 and since October 1934, the importation of butter into Italy has been subject to quantitative restriction through the establishment of quotas. In addition, the manufacture of margarine is taxed and the sale of margarine except for direct consumption is prohibited.8/

7/ Ibid

8/ Ibid., p. 77.

IV

Encouragement of Exports of Butter by Foreign Countries.

While butter-importing countries have been restricting imports of butter and limiting the markets for dairy products from surplus-producing countries, exporting countries have resorted to export bounties and other methods in an effort to stimulate exports or to raise domestic prices.

1. Australia.

The Paterson Plan was in effect in Australia during the period 1925 to April 1934. Under this plan, Australian butter producers were assessed on the basis of the volume of butter produced, the proceeds from these assessments being used to pay a bounty to exporters of butter. The plan was operated by the dairy industry without Government aid. At the time the plan was put into operation, only about one-third of the Australian butter output was exported. Since the effect of the plan was to raise domestic prices (paid on two-thirds of the output) above world prices by approximately the amount of the bounty, it appears that a gain resulted for a time from the operation of the plan.

The profitableness of this was directly affected by the relationships between the volume of domestic consumption and the volume of exports. As a result of the increased returns to butter producers due to the operation of the plan, production was stimulated, which tended to increase the proportion of the domestic output exported. This necessitated larger assessments and resulted in smaller benefits. Attempts to curb production were made by reducing the bounty from time to time, thus lowering the domestic price. The effectiveness of the plan was further reduced through the refusal of certain factories to meet the assessment and through the increase of farm-made butter exempt from the assessment.[9]

On May 1, 1934, a new plan was put into effect, under which uniform domestic prices are established. The price was originally fixed at 140 shillings per hundredweight of 112 pounds.[10] The entire output of butter is pooled, and the losses incurred in selling butter in foreign markets at lower prices are spread among all producers. The plan is administered by the Commonwealth Produce Equalization Committee, Ltd., the organization of which is provided for in the legislation setting up this program. Under the provisions of this program, a total domestic allotment based on Australia's domestic requirements is determined. The total allotment is apportioned among the various States and each State is required to export a given

9/ Brookens, P. F., "The Paterson Plan and Australian Butter Prices," Journal of Farm Economics, 10 (4): 540-542, October 1928. Also (U.S) 73rd Congress, Senate Document No. 70, World Trade Barriers in Relation to American Agriculture, pp. 263-264, and p. 302, 1933; and World Dairy Prospects, June 22, 1934, Bureau of Agricultural Economics, United States Department of Agriculture.

10/ Foreign Dairy Programs Far Reaching, Division of Information, Agricultural Adjustment Administration, United States Department of Agriculture, p. 13, September 1934.

percentage of its production. In the event the consumption in any State is above the anticipated requirements so that a smaller proportion is exported, the State Stabilization Committee is required to pay to the Commonwealth Committee the excess returns derived from that portion of the local sales which was intended for export. In States where the local consumption falls below the allotted requirement so that a larger proportion is exported, the stabilization committee receives a payment from the equalization fund.11/

The new legislation provided also for a referendum of dairy farmers on the question of whether they want the new plan to remain in force. This had to be taken within six months after the Act became effective. The referendum was held on October 11, 1934, the results of which were favorable to the plan.

As a result of the above measures, the United States Treasury has imposed, since 1928, a countervailing duty in addition to the 14-cent statutory duty, on imports of Australian butter into the United States. The rate of the additional duty at present is 4-1/2 pence (7.3 cents at October 1935 rates of exchange).12/

2. Denmark.13/

Prior to December 1933 the Danish Government did not extend any aid to the dairy industry of that country, though arrangements were in effect which provided for the equalization by means of pooling of the differences in prices obtained for butter exported to various markets.

A number of Government decrees, made effective on December 13, 1933, provided in part for the imposition of graduated taxes on butter for domestic consumption so long as the Copenhagen quotation for export butter was below 2.50 krone per kilogram (24.8 cents per pound at the October 1935 rate of exchange). If the quotation was between 1.75 krone and 2.15 krone, a tax of .35 krone per kilogram (3.4 cents per pound) was collectible. If the quotation was below 1.75 krone the tax was increased by the amount by which the quotation was below 1.75 krone. On the other hand, if the Copenhagen price was above 2.15 krone the tax was lowered by the amount by which the price exceeded 2.15 krone. No tax was collected if the export price exceeded 2.50 krone. The proceeds from the taxes were impounded in a special fund for making payments to farmers.

11/ World Dairy Prospects, June 22, 1934, op.cit.
12/ Treasury Decision 43067, Treasury Decisions, Volume 54, 1928, United States Treasury Department.
13/ The information contained in the remainder of this section of this paper was obtained, except as otherwise noted, from (United Kingdom) Imperial Economic Committee, Intelligence Branch, Dairy Produce Supplies in 1934, Supplement to Weekly Dairy Produce Notes, July 1935.

The decrees also provided for the imposition of a tax of .30 krone per kilogram (3.0 cents per pound) on all domestic oils and fats utilized in margarine production, except lard and tallow. Foreign oils and fats were subject to a similar duty upon importation, while imported margarine and margarine cheese were dutiable at .25 krone per kilogram. A portion of the proceeds from these levies were used for the purchase of margarine and beef for the needy, while the balance accrued to the Treasury.

In addition, a plan has been in force since 1923 for the slaughtering of cattle at guaranteed prices. A large proportion of the cattle disposed of were old dairy cows. Under this plan approximately 130,000 animals were slaughtered in 1933, 150,000 in 1934, and 40,000 in the first half of 1935.14/

Due to an increase in margarine consumption and a considerable reduction in butter consumption as a result of the operation of the above plan, the tax on butter described above was revoked on December 1, 1934. The tax levied on raw materials imported for margarine manufacture was also terminated at the same time.15/

Since early in 1934 a plan has been in operation, in addition to the above measures, whereby surplus quantities of butter are removed from the normal channels of trade and held in storage for distribution at a later time on the domestic market. The object of these operations is to stabilize butter prices. The plan is financed by a fund of two million krone furnished by the cooperative and private exporters and the Butter Quota Fund. Operations under this plan were conducted only in a few instances in 1934.16/

Since November 10, 1935, a countervailing duty has been in effect on Danish butter imported into the United States, in addition to the 14-cent customs duty levied on all foreign butter shipped into this country. The rate of the countervailing duty is determined from time to time. On the basis of conditions prevailing at the time of the imposition of the duty, the rate would be approximately four cents per pound.17/

14/ Dairy Produce Supplies in 1934, op. cit., p. 86.
15/ World Dairy Prospects, January 31, 1935, Bureau of Agricultural Economics, United States Department of Agriculture.
16/ Dairy Produce Supplies in 1934, op. cit., p. 86.
17/ Treasury Decision 47896, Treasury Decisions, Volume 68, 1935, United States Treasury Department.

3. Estonia.

Under a law passed in January 1934, the price of butter to Estonian producers was fixed at a minimum of 1.50 krone per kilogram (approximately 18.3 cents per pound at par of exchange). If the market price declined below this minimum price, producers were paid the difference, the funds being furnished by the State from general tax revenues and other sources. At the same time a bounty was paid to exporters for butter sold in foreign markets. A further provision authorized the Minister of Agriculture to fix the quantities of butter which exporters were to sell in the various export markets. Failure to comply with his orders resulted in a forfeiture of the bounties by the non-complying exporters.

The minimum price originally guaranteed to producers was changed on several occasions since the enactment of the above law. From July 16 to October 15, 1934, it was fixed at 1.10 krone. After raising the price to 1.45 krone for the first three months in 1935, it was again lowered and in July it was 1.20 krone per kilogram.[18]

4. Finland.

The provisions of a law enacted in Finland on December 21, 1932, provided for the granting of a bounty to exporters if the wholesale price of butter fell to 20 marks per kilogram (19.6 cents per pound at the October 1935 rate of exchange) or less. The bounty was originally fixed at 3 marks. A bounty, equal to the difference between the prevailing price and 23 marks, was paid if the price exceeded 20 marks but fell below 23 marks. Provision for a bounty of 2 marks per kilogram on cheese is also contained in the above laws. The full bounty is paid if the price is less than 11 marks, but if the price exceeds 11 marks and is less than 13 marks only the difference is paid. In the computation of the bounty the wholesale price of butter was based on the Copenhagen quotation for export butter with certain adjustments to allow for difference in the scale of Finnish and Danish prices. In the case of cheese, the bounty was based on the quotation for cheese at Kempten. The bounty on butter ranged from 4.50 to 6.50 marks per kilogram during 1934.

The above law was amended in January 1935, and the Government was given discretionary power to fix the rate of the bounty. In June 1935, the bounty was 6.50 marks on butter and 2.50 marks on cheese. An exception was made in the case of cheese exported to the United States, where no bounty appears to have been paid.

18/ Dairy Produce Supplies in 1934, op. cit., p. 86

Further measures designed to aid the dairy industry in Finland were enacted in February 1934 and provided for the imposition of an import embargo on butter, margarine, lard and fat. These measures were in effect, however, only for a short time and were superseded by a new law in April 1934. This law conferred authority on the State Council to increase tariff rates on butter, margarine, lard and raw fat up to four times the basic rate. Pursuant to this authority the duties on these commodities were increased. In the case of butter, the duty was raised from 5 to 12 marks per kilogram.

Additional legislation, providing for the imposition of excise taxes on margarine, margarine cheese, artificial fats, fat mixtures and feedstuffs, was enacted in May 1934. In addition to the imposition of a heavy excise tax on fodder, the Government prohibited the importation of this commodity in July 1934. The margarine industry was originally permitted to operate without an excise tax on its product, on condition that the industry would restrict production, but it appears that a tax of 3 marks per kilogram was nevertheless placed on margarine in 1935.19/

5. Latvia.

According to the provisions of a decree issued by the Latvian Government in August 1930, producers are paid a bounty on milk utilized in the production of butter for export. A law enacted in June 1932 provided further for the payment of guaranteed prices for the various grades of butter, 2.50 lat per kilogram (approximately 21.9 cents per pound at par of exchange) for first grade butter and 2.40 lat per kilogram (21.1 cents per pound) for second grade butter. A bounty, equal to the difference between the guaranteed price and the world price, is paid to producers supplying milk to registered dairies if the world price falls below the guaranteed price. In the event the world price exceeds the guaranteed price, those receiving the higher price are required to contribute one-half of the excess to a special fund, which is used for the payment of bounties when the world price is below the guaranteed price. Bounty payments during 1934 were based on guaranteed prices of 2.25 lat per kilogram for first grade butter, 2.15 lat per kilogram for second grade butter, an average domestic price of 1.94 lat, and an average export price of .915 lat.

In order to facilitate the marketing of butter in the domestic and foreign markets, the Latvian Government set up a Butter Export Central in December 1934. In addition to controlling the marketing of butter, this organization was to facilitate the payment of bounties to producers, and was to attempt to gain new markets. The operations of the Butter Export Central were to be facilitated by the extension of credits by the Bank of Latvia.20/

19/ Ibid., pp. 86-87.
20/ Ibid., p. 87.

6. Netherlands.

Relief to dairy farmers in the Netherlands was provided for in the Crisis Dairy Act, enacted in July 1932, and in the Agricultural Crisis Act, enacted in August 1933. The objective of these measures was to secure prices to producers approaching cost of production. These laws provided for the levying of a consumption tax on butter domestically consumed. The laws also require that margarine intended for domestic consumption should contain a certain proportion of butter. All butter and other edible fats sold for domestic consumption were required to have a stamp affixed, which was the method of collecting the consumption tax. A similar tax was levied on margarine, the rate of which was to vary with the butterfat content. In addition, special taxes on imports of fats were levied through the requirement that importers take out "transport permits". Similar permits were required with respect to exports. The sums collected in consumption and special taxes were placed in a fund from which payments were made to producers.

In July 1932, the consumption tax on butter amounted to 0.42 florin per kilogram (12.9 cents per pound at the October 1935 rate of exchange) but was increased thereafter. In January 1935, it was 0.90 florin (27.7 cents per pound); in March 1935, 1.10 florins (33.8 cents per pound); and in June 1935, 1.00 florin (30.7 cents per pound).

A program involving a reduction in milk production through a reduction in cow numbers has been in operation in the Netherlands since October 1933. Between that month and March 1934, over 119,000 cattle were slaughtered. After suspending this program for a time, the Government announced in the autumn of 1934 that 150,000 additional cattle would be slaughtered. The meat is canned and distributed to the needy. Another phase of this program involved the limitation of the number of calves to be kept for milk to 410,000 in 1934. The administration of the program is vested in the Cattle Central.

Further measures to aid the dairy industry included an educational campaign to increase fluid milk consumption, the distribution of margarine (which contains no butter) to the unemployed, and a compulsory requirement that creameries return to producers a portion of the skim milk yielded in separating cream from whole milk.

A program designed to control the production of milk was instituted in June 1935. This program provided for the payment of a subsidy on a base quantity of milk produced by each farmer, while for milk produced in excess of this base a penalty was to be imposed. The original total allotment was computed on the basis of an 11 percent reduction from the average production during 1933 and 1934, though individual producer's bases varied according to type of farm. The bases apply, however, only for milk intended for sale as milk or in the form of some manufactured product or cream. Provision is also made for the licensing of farms producing butter

The subsidy paid on basic quantities of milk amounted to .0288 florin per kilogram (0.9 cent per pound at the October 1935 rate of exchange) in June 1935. The program is financed by a tax "on exports of dairy products to countries which have imposed quota regulations". 21/

7. Sweden.

According to a decree of June 30, 1932, as amended by later legislation, a tax was to be placed on all milk sales and on the use of milk in the production of manufactured products or for cream, in Sweden. The proceeds of this tax were to be used to pay a bounty on butter exported from the country. In this manner, producers were to receive a uniform return on butter and other dairy products regardless of whether such dairy products were exported or sold for home consumption. The administration of the program is vested in a State Milk Committee while the funds "are administered by the Swedish Dairy Farmers' National Union". 22/

Further measures to aid the dairy industry included the imposition of higher import duties on imports of margarine and an excise tax on margarine produced within the country. In addition, a monopoly to import dairy products was granted to the State Milk Committee.

The program with respect to the levy on milk has been extended and expanded since it was originally instituted. In addition to the payment of bounties on exported dairy products, the proceeds are used for payments to equalize returns from milk used for various purposes and to meet the expenses incurred in the operation of the various measures adopted with respect to the dairy industry. 23/

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The various plans to increase the income of dairy producers in the above countries may be summarized as follows: (1) Australia fixes the internal price. All the butter is pooled, so that the loss on the exported butter is borne equally by all producers. (2) A market stabilization plan is in effect in Denmark, temporarly surpluses being placed in cold storage and later distributed in the home market. (3) Estonia and Latvia guarantee fixed prices to producers. The difference between the fixed price and the price received by producers is paid to producers by the respective Governments. Bounties to exporters are also paid in these countries. (4) Finland grants a bounty on exports of butter and cheese. (5) The Netherlands levies a tax on domestically consumed butter and Sweden levies a tax on all milk, Sweden using the proceeds from the tax to pay bounties to exporters. Compulsory admixture of butter with margarine for home consumption is required in the Netherlands, and cow reducing programs were adopted in that country and also in Denmark.

It is pertinent to note that New Zealand, which is the second largest world exporter of butter, does not subsidize the exportation of this commodity at the present time. While the payment of a subsidy to dairy farmers has been advocated in that country in the past, either as an outright gift from general tax funds or by way of a loan, the Dairy Industry Commission reporting in 1934 on conditions and problems confronting the industry definitely opposed such action. 24/

21/ Ibid., pp. 87-88.
22/ Ibid., p. 88.
23/ Ibid.
24/ Report of the Dairy Industry Commission, New Zealand, pp. 66-67, 1934.

V

The Tariff on Butter in the United States.

The rate of duty levied on butter imported into the United States is a consideration in the analysis of a plan to increase the income of producers through the subsidization of exports. It is obviously important that the tariff be at such a rate that imports will not be attracted to an extent that gains from the program will be vitiated by such imports. Domestic prices have exceeded world prices by more than the prevailing tariff of 14 cents only at infrequent intervals. In view, however, of the increasing restrictions of importing countries against imports of butter and the increasing production of the butter-exporting countries, it is possible that world prices will decline to a point where domestic prices will exceed such world prices by more than the import duty, unless some measures are adopted by the exporting countries to avoid a decline in prices. If the United Kingdom places quota restrictions on butter from all sources, foreign and Dominion, or increases the present tariff rate, the short-time effect probably would be to encourage imports into the United States. The successful operation of the subsidization plan may necessitate, therefore, either increased import duties or other import restrictions in the United States. On the other hand, it should be noted that there is an obvious inconsistency, from the point of view of foreign trade policy, in any plan designed to increase exports of butter from the United States to foreign countries which also, at the same time, contemplates the exclusion of foreign butter from the United States.

Recent Changes in Duties. The Tariff Act of 1913 reduced the duty on butter from 6 to 2.5 cents per pound. This rate was maintained until May 28, 1921, when the Emergency Tariff Act restored the 6-cent duty on butter. On September 21, 1922, the Fordney-McCumber Tariff Act was passed, increasing the duty on butter to 8 cents. On March 6, 1926, President Coolidge raised the rate on butter by proclamation to 12 cents, effective April 6, 1926. The duty was further raised on June 17, 1930, when the Hawley-Smoot Tariff Act was passed, increasing the rate to 14 cents per pound, effective on June 18, 1930.

In Table 5 are shown the rates of duty on butter under the various tariff acts from 1909 to 1930.

Table 5. Rates of import duties on butter, dates of enactment and effective dates, 1909-1930,

Date of act	Rate of duty	Effective date of tariff
August 5, 1909	6 cents per pound	August 6, 1909
October 3, 1913	2.5 cents per pound	October 4, 1913
May 27, 1921	6 cents per pound	May 28, 1921
September 21, 1922	8 cents per pound	September 22, 1922
March 6, 1926 1/	12 cents per pound	April 6, 1926
June 17, 1930	14 cents per pound	June 18, 1930

Compiled from tariff acts.

1/ By Presidential proclamation.

VI

Possibilities of Increasing Returns to Producers Through Subsidization of Exports

The question of whether returns to producers would be increased through the subsidization of exports depends chiefly upon the nature of the consumer's demand for butter in the United States. The price received for the exported butter depends, however, to some extent upon the nature of the demand for butter in importing countries. It is generally recognized that, in the case of a commodity the demand for which is elastic, that is, a given percentage change in supplies results in a smaller opposite percentage change in price, the larger the volume of the commodity sold the larger would be the gross revenues from such sales. On the other hand, in the case of a commodity the demand for which is inelastic, that is, a given percentage change in supplies results in a larger opposite percentage change in price, the smaller the volume of the commodity sold the larger would be the gross revenues from such sales, within such limits for which the demand is inelastic. It is recognized, however, that there are probably very few commodities the demand for which is inelastic for all ranges in price.

It is evident from the above that the returns from a commodity the demand for which is inelastic in the domestic markets could be enhanced through a reduction in the volume of supplies in those markets, and the sale of these excess supplies either in markets where the demand is less inelastic, or where the commodity has not been sold before, the amount of gain being related to such factors as the relative sizes of the two markets, additional transportation and marketing costs, and the like.

The results of a preliminary study of the factors affecting butter prices in the United States indicate that within the price range prevailing since 1919 the demand for butter is inelastic. On this basis returns to producers would be increased through a plan involving the exportation of a portion of the domestic supplies to foreign countries.

<u>Quantity of Butter to be Exported</u>. Several considerations are involved in the determination of the quantity of butter to be exported. The quantity exported should not be so large as to result in prices high enough to stimulate production to the extent that the gains from the program would be vitiated. Obviously, the precise quantity to be exported would depend upon supply and demand conditions prevailing at the time the program was put into effect. While on the basis of the above results the

larger the quantity exported, within the price limits for which the demand is inelastic, the larger would be the gains, it would be inadvisable to export such a quantity as would disrupt foreign markets and perhaps invite retaliation.

The time of the year when export operations would be most feasible is a factor of some importance. Wholesale prices of butter in the United States are usually lowest in the summer months and highest in the winter months. The seasonal fluctuations in prices are considerable. Prices for New Zealand butter also fluctuate seasonally, though the fluctuations are not so much pronounced as the fluctuations in the New York prices. The lowest prices are reached in the winter and the highest prices in the summer. New Zealand finest butter is approximately comparable in quality to 92-score butter in the United States. As a result of the different seasonal variations in prices, the differential of New York prices over London prices for New Zealand butter is least in the summer months and greatest during the winter months. (In Table 6 are shown the indexes of the seasonal variation of butter prices at New York and at London.) On the basis of the above, it would appear to be the most economical, from the point of view of the cost of subsidization, to export butter during the period from May to August.

The butter exported under the plan presumably would be purchased in the domestic market in the normal competitive trade channels. Such operations could be conducted by an organization set up for that purpose or by an existing governmental agency. The effect of these purchases on increasing domestic prices would be about the same as a decrease in domestic supplies arising through any other cause. On this basis, the total volume of domestic supplies, including the volume exported, would be sold at the increased price. A loss, however, obviously would be incurred equal to the difference between the cost of purchasing the butter for export (assuming it would be purchased at the increased domestic price) and the amount received for such butter. The amount received for the exported butter would be the London price for comparable grades of butter prevailing at the time the butter was exported, less transportation and handling charges, insurance costs, and the British import duty. The duty at the October 1935 rate of exchange is 3.3 cents per pound. It is probable that the other charges amount to about 1.5 cents per pound.

<u>The Elasticity of Demand for Butter in the United Kingdom</u>. The price that would be obtained for the butter exported to the United Kingdom (it is assumed that all the butter would be exported to that country) would depend upon butter prices prevailing in the United Kingdom at the time the plan is put into operation and the extent to which these prices would decline as a result of additional imports. Since most butter

Table 6. Indexes of seasonal variation of the price of 92-score butter at New York and of the price of New Zealand finest butter at London.

Month	92-score butter at New York 1/	New Zealand finest butter at London 2/
May	93.0	96.3
June	92.5	99.6
July	93.2	104.7
August	94.0	105.7
September	100.0	107.3
October	103.6	105.4
November	109.1	98.5
December	109.8	96.8
January	101.9	94.9
February	101.9	96.8
March	103.6	97.0
April	97.4	97.0
Average	100.0	100.0

1/ Bureau of Agricultural Economics. Summary of Dairy Situation Statistics. Table 116, p. 65.

2/ Computed by ratio-to-trend method from prices for New Zealand finest butter at London, obtained from Bureau of Agricultural Economics.

exporting countries are subsidizing exports, it is assumed that imports into the United Kingdom from other countries would not be curtailed to any great extent.

The extent to which prices in the United Kingdom would decline as a result of imports from the Untied States may be estimated on the basis of a recent study of the Agricultural Economics Research Institute of the University of Oxford. 25/ This study indicatis that at the level of supplies prevailing in the United Kingdom in 1933 the elasticity of demand for butter is 0.33; or, in other words, a change in supplies of 0.33 percent would have resulted in 1933 in an opposite change in price of 1 percent. The price-quantity curve in this study was obtained by correlating the retail price, deflated by an index of income (wages less rents, times employment), with supplies of butter available for home consumption.

Possibilities of British Import Restrictions

One of the major potential obstacles in the way of a butter export subsidization plan is the possibility of British import restrictions. In view of the provisions of the Ottawa Agreements with respect to the possible limitation of imports of dairy products after November 15, 1935, and of the provisions of the agreements concluded by the United Kingdom with a number of foreign countries, as noted above, the possibility of the adoption of a system of quantitative regulation of imports of butter in the near future is an important consideration. In the event such regulations are established a very low quota on imports from the United States probably would be established since exports from this country to the United Kingdom in recent years have been negligible. At the same time there is a strong possibility that the United Kingdom would impose an embargo against American butter if exports were subsidized directly or indirectly by the Federal Government. A provision of section 1 of paragraph 5 of an Act of the British Parliament of November 15, 1932, enacted pursuant to the provisions of the Ottawa Agreements, is of significance in this connection. This provision reads as follows:

> "If at any time the Board of Trade are satisfied that any preferences granted by this Act in respect to any particular class or description of goods, being preferences granted in fulfillment of the agreement set out in Part I of the First Schedule of this Act, are likely to be frustrated in whole or in part by reason of the creation or maintenance, directly or indirectly, of prices for that class or description of goods through State action on the part of any foreign country,

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25/ Cohen, R.L., and Murray, K. A. H., The Effect of Butter and Cheese Supplies on Surplus Milk Prices, Agr. Ec. Research Inst., University of Oxford, December 1933.

the Board of Trade may by order prohibit the importation into the United Kingdom of goods of that class or description grown, produced or manufactured in that foreign country."

Summary

The foregoing treatment of the possibilities of increasing returns to dairy farmers through the subsidization of exports of butter may be summarized briefly, as follows:

(1) It appears that the exportation of a substantial quantity of butter would have the effect of increasing domestic prices to such a degree that returns to producers from a given volume of production would be greater than if the total supply were sold in the domestic market, assuming that foreign markets could be developed.

(2) The United Kingdom would constitute the only important outlet for a substantial volume of exports of butter from the United States because of the severe import restrictions prevailing in Germany, which is the only other important butter-importing country. Inview, however, of possible countervailing action by the United Kingdom through the imposition of an embargo, it appears that it would not be feasible to undertake an export subsidization program with respect to butter, unless other outlets were developed.

(3) The successful operation of a plan to subsidize exports of butter would be limited by the possibilities of imports during our season of low production. An increase in the tariff on butter would appear to be essential to assure maximum benefits from the operation of the plan, if it appeared that, at the time the plan were put into operation, the effect of the plan would be to raise the price of butter in the United States to a point where imports would be attracted over the tariff barrier.

(4) In addition to the foregoing, it is highly probable that it would be necessary to adopt some form of control of milk production, since, if this were not done, there would be a tendency for the increased prices resulting from the subsidization plan to be associated with an increase in production which would tend to lower prices.

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